

WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a member selected from the group consisting of:

(a) a polynucleotide encoding the polypeptide as set forth in Figure 1;

(b) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit No. \_\_\_\_\_;

(c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a) or (b); and

(d) a polynucleotide fragment of the polynucleotide of (a) or (b), or (c).

2. The polynucleotide of Claim 2 which encodes the polypeptide comprising amino acid 1 to 249 of SEQ ID NO:2.

3. A vector containing the polynucleotide of Claim 1.

4. A host cell genetically engineered with the vector of Claim 3.

5. A process for producing a polypeptide comprising: expressing from the host cell of Claim 4 the polypeptide encoded by said polypeptide.

6. A process for producing cells capable of expressing a polypeptide comprising genetically engineering cells with the vector of Claim 3.

7. A polypeptide selected from the group consisting of (i) a polypeptide having the deduced amino acid sequence of SEQ ID NO:2 and fragments, analogs and derivatives thereof; and (ii) a polypeptide encoded by the cDNA of ATCC Deposit No. \_\_\_\_\_ and fragments, analogs and derivatives of said polypeptide.

8. The polypeptide of Claim 13 wherein the polypeptide comprises the amino acids of Figure 1.

9. An antibody against the polypeptide of Claim 7.

10. A compound which inhibits activation of the polypeptide of claim 7.

11. A method for the treatment of a patient having need of HDGF-2 comprising: administering to the patient a therapeutically effective amount of the polypeptide of claim 7.

12. The method of Claim 11 wherein said therapeutically effective amount of the polypeptide is administered by providing to the patient DNA encoding said polypeptide and expressing said polypeptide *in vivo*.

13. A method for the treatment of a patient having need to inhibit a HDGF-2 polypeptide comprising: administering to the patient a therapeutically effective amount of the compound of Claim 10.

14. A process for diagnosing in a patient a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim 7 comprising:

determining a mutation in a nucleic acid sequence encoding said polypeptide in a sample derived from a patient.

15. A diagnostic process comprising:

analyzing for the presence of the polypeptide of claim 7 in a sample derived from a host.

16. A method for identifying compounds which is an agonist of the polypeptide of claim 7 comprising:

contacting a cell expressing on the surface thereof a receptor for the polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor, with a compound under conditions to permit binding to the receptor; and

determining whether the compound binds to and activates the receptor by detecting the presence of a signal generated from the interaction of the compound with the receptor.

17. A method for identifying compounds which bind to and inhibit activation of the polypeptide of claim 13 comprising:

contacting a cell expressing on the surface thereof an HDGF-2 receptor polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor polypeptide, with HDGF-2 polypeptide and a compound to be screened under conditions to permit binding to the receptor polypeptide; and

determining whether the compound inhibits the HDGF-2 polypeptide by detecting the absence of a signal.